

Application No.: 10/057126

Docket No.: MWS-042

REMARKS

Claims 1-30 were presented for examination. Claims 1-30 have been rejected under 35 U.S.C. § 103(a) as unpatentable. Claims 1, 10, 19, 23 and 27 are independent claims. The following comments address all stated grounds for rejection, and place the presently pending claims 1-30 in condition for allowance.

I. Summary of an Illustrative Embodiment of the Present Invention

A summary of the illustrative embodiment has been presented to provide the reader with a more concrete understanding of the present invention. In the illustrative embodiment, exemplary in the Specification, the block diagram model is a block diagram model and contains graphical elements specified by the user. Source code is generated from source model language for the elements of the block diagram model specified by the user. A parser process analyzes the generated source code and replaces listed block references in the comment section with links that refer back to the corresponding sections of the source model language representing the blocks of the model diagram. A report containing the source code corresponding to the graphical model is generated to include hyperlinks referencing the elements of the block diagram model. A hyperlink is a selectable connection and can be selected in the report related to the source code, resulting in electronic navigation to the element of the block diagram model to which the source code is related. The use of a generated report containing hyperlinks allows the user to navigate from the report to elements in a block diagram model that correspond to the source code.

Application No.: 10/057126

Docket No.: MWS-042

II. Claim Rejections Under 35 U.S.C. § 103(a)**A. Claims 1-5, 9-14 and 18-29 Rejected under 35 U.S.C. § 103(a) as Unpatentable**

Claims 1-5, 9-14, 18-29 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,269,475 to Farrell et al. ("Farrell") in view of U.S. Patent No. 6,792,418 to Binnig et al. ("Binnig"). Claims 1, 10, 19, 23 and 27 are independent claims. Applicants respectfully traverse these rejections.

1. Independent Claims 1, 10, 19 and 23 Rejected under 35 U.S.C. § 103(a)

Claims 1, 10, 19 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell in view of Binnig. Applicants respectfully traverse these rejections and contend that neither Farrell nor Binnig, alone or in combination, render claims 1, 10, 19 and 23 unpatentable.

Independent claims 1, 10, 19 and 23 are directed to generating source code corresponding to a block diagram and generating hypertext links associating elements of the generated source code with elements of the block diagram model.

Farrell teaches an object oriented program editor ('Editor'). The Editor taught in Farrell creates an object model to represent the source code and codeblocks. Object models represent recognized elements in a programming language, such as a class. An object model is generated from the textual source code. The object models simply aid the user in developing source code and are not elements of a block diagram model. The Editor allows the user to edit the source code and codeblocks using the text editor or the graphical display. A codeblock is defined by Farrell as a sequence of text characters representing an instance of a syntactic element of a programming language, where a syntactic element is defined as a unit of source code. In other

Application No.: 10/057126

Docket No.: MWS-042

words, textual language creates a tree of syntactic elements, and therefore a tree of codeblocks. Codeblocks can be formed from the object model and contain pointers to the source code as well as to the object model. The pointers taught in Farrell are used to indicate the position of the codeblock in the source code and object model.

Binnig teaches a database manager and system using a fractal hierarchical index structure. It is directed to a scheme for adding elements to a database; a scheme for acting upon elements in a database and; a scheme for effective searching and discovery of elements in a database. It defines "access pointer" to refer to a relative or absolute pointer that points to a file in a file structure or file directory, or a sequence number or coordinates for the retrieval of an element from a database. The access pointer provides a physical or logical link between a semantical unit representing the element and the element, and may describe the physical or logical location where the element is stored in the database. That is, an access pointer refers to the memory address of the element in the database. When the user is looking for an element they will input a string. When the input string is deemed to be associated to a particular semantical unit the user can act upon the corresponding database element by using the access pointer that is associated to the semantical unit. Binnig suggests that access pointers can be hypertext links.

Both Farrell and Binnig fail to teach or suggest generating source code corresponding to a block diagram model. Binnig teaches access pointers to provide a physical or logical link between a semantical unit and an element for element retrieval in a database. Farrell teaches using object models, as a representation of textual elements in a programming language to aid a user in developing the source code. The present invention concerns a block diagram model and generating source code corresponding to the block diagram model. Both Farrell and Binnig are

Application No.: 10/057126

Docket No.: MWS-042

distinguished from the present invention because the Editor of Farrell teaches object models to represent recognized elements of a programming language, such as a class, and Binnig teaches a searchable database. As such, neither Farrell nor Binnig alone or in combination teach the step of generating source code corresponding to a block diagram model.

Further, both Farrell and Binnig fail to teach or suggest generating source code from a block diagram and generating hypertext links associating the source code with the block diagram. In the claimed invention, a hypertext link provides a selectable connection that associates an element of the generated source code with an element of the block diagram model for navigation from the source code to the block diagram model. Farrell teaches pointers used for indicating the position of codeblocks, which are not selectable to navigate from the source code to a block diagram model. Binnig teaches access pointers as hypertext links that provide physical or logical links that point to elements in a database for element retrieval in the database. More specifically, Binnig teaches the access pointer points to the memory address of an element to allow access to the element, which is unlike a hypertext link in the claimed invention that is used to navigate from source code to a block diagram model. Farrell and Binnig are distinguished from the present invention because the present invention teaches hyperlinks, which are selectable by the user, associating generated source code to a block diagram model. As such, neither Farrell nor Binnig, alone or in combination, teach or suggest generating hypertext links associating elements of the generated source code with elements of the block diagram model.

Notwithstanding that both Farrell and Binnig fail, alone or in combination, to teach or suggest generating hypertext links associating the source code with the block diagram, the Examiner nevertheless attempts to find a motivation for the combining of Farrell and Binnig and

Application No.: 10/057126

Docket No.: MWS-042

in doing so relates the pointers taught by Farrell with the access pointers taught by Binnig. As discussed above Binnig teaches an access pointer for searching a database and Farrell teaches pointers in an object oriented program editor that indicate the location of the codeblocks in the source code and object model. Applicants argue there is no motivation to combine pointers of a program editor as taught by Farrell with access pointers of a searchable database as taught by Binnig. The object oriented program editor of Farrell provides software developers with an environment for developing source code. The searchable database of Binnig allows users of the database to search for elements efficiently. As such, Farrell addresses issues faced in software development and Binnig addresses issues faced in searching databases. It would not be obvious to one skilled in the art, at the time the invention was made to combine the hypertext links taken from the context of Binnig's searchable database and incorporate them into Farrell's object oriented program editor.

For at least the aforementioned reasons, neither Farrell nor Binnig alone or in combination teach or suggest generating source code corresponding to a block diagram, and generating hypertext links associating elements of the generated source code with elements of the block diagram model. Claims 2-5 and 9 depend on claim 1. Claims 11-14 and 18 depend on claim 10. Claims 20-22 depend on claim 19. Claim 24-26 depend on claim 23. Thus, neither Farrell nor Binnig alone or combined detract from the patentability of claims 1-5, 9-14 and 18-26. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the Examiner's rejection of claims 1-5, 9-14 and 18-26 under 35 U.S.C. § 103(a).

Application No.: 10/057126

Docket No.: MWS-042

2. Independent Claim 27 Rejected under 35 U.S.C. § 103(a)

Claim 27 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Farrell in view of Binnig. The Applicants respectfully traverse this rejection.

Independent claim 27 recites a method for providing source code identifying an element of a graphical model and generating a document with information about the source code. This claim further recites providing, in a document, a hyperlink referencing the element of the graphical model. That is, the method generates a document about source code identifying an element of the graphical model and the document includes a hyperlink referencing the element of the graphical model.

Neither Farrell nor Binnig teach or suggest providing source code identifying an element of a graphical model and generating a document with information about the source code. Binnig teaches access pointers to provide a physical or logical link between a semantical unit and an element for element retrieval in a database. Farrell teaches using object models, as a representation of textual elements in a programming language to aid a user in developing the source code. The present invention teaches a block diagram model and generating source code corresponding to the block diagram model. Both Farrell and Binnig are distinguished from the present invention because the Farrell teaches object models to represent recognized elements of a programming language, such as a class, and Binnig teaches a searchable database. As such, neither Farrell nor Binnig teach or suggest, alone or in combination, providing source code identifying an element of a graphical model.

Further, both Farrell and Binnig fail to teach or suggest providing, in a document, a

Application No.: 10/057126

Docket No.: MWS-042

hyperlink referencing the element of the graphical model. In the claimed invention, a hypertext link provides a selectable connection that associates an element of the generated source code with an element of the block diagram model for navigation from the source code to the block diagram model. Farrell teaches pointers used for indicating the position of codeblocks, which are not selectable to navigate from the source code to a block diagram model. Binnig teaches access pointers as hypertext links that provide physical or logical links that point to elements in a database for element retrieval in the database. More specifically, Binnig teaches the access pointer points to the memory address of an element to allow access to the element, which is unlike a hypertext link that is used to navigate from source code to a block diagram model. Farrell and Binnig are distinguished from the present invention because the present invention teaches hyperlinks, which are selectable by the user, associating generated source code from a block diagram model. As such, neither Farrell nor Binnig, alone or in combination, teach or suggest generating hypertext links associating elements of the generated source code with elements of the block diagram model.

For at least the aforementioned reasons, neither Farrell nor Binnig teach or suggest providing source code identifying an element of a graphical model and generating a document, comprising information about the source code. Nor do Farrell or Binnig teach or suggest providing, in a document, a hyperlink referencing the element of the graphical model. Claims 28-29 depend on claim 27. Thus, neither Farrell nor Binnig alone or combined detract from the patentability of claims 27-29. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the Examiner's rejection of claims 27-29 under 35 U.S.C. § 103(a).

Application No.: 10/057126

Docket No.: MWS-042

B. Claims 6-8, 15-17 and 30 Rejected under 35 U.S.C. § 103(a) as Unpatentable

Claims 6-8, 15-17 and 30 are rejected under 35 U.S.C. § 103(a) as unpatentable over Farrell in view of Binnig in further view of U.S. Publication No. 2002/0055891 to Yang ("Yang"). The Applicants respectfully traverse this rejection.

1. Dependent Claims 6-8, 15-17 and 30 Rejected under 35 U.S.C. § 103(a) as Unpatentable

Dependent claims 6-8, 15-17 and 30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Farrell in view of Binnig in further view of Yang. Claims 6-8, 15-17 and 30 depend on claims 1, 10 and 27, respectively and incorporate all the patentable limitations of these independent claims.

As discussed above, neither Farrell nor Binnig detract from the patentability of independent claims 1, 10, 19, 23 and 27. Nor does Yang detract from the patentability of independent claims 1, 10, 19, 23 and 27. Yang teaches an electronic catalogue utilizing 3D image display to provide a researching method and researching system for interests in commercial goods. Yang teaches that the electronic catalogue documents may be prepared in Markup languages such as HTML, XML and SMGL. Yang fails to teach or suggest generating source code corresponding to a block diagram and generating hypertext links associating source code with a block diagram. As such, Yang fails to bridge the factual deficiencies of Farrell and Binnig.

For at least the aforementioned reasons, neither Farrell, nor Binnig, nor Yang, alone or in combination, teach or suggest all the elements of claims 1, 10, 19, 23 and 27. Claims 5-7

Application No.: 10/057126

Docket No.: MWS-042

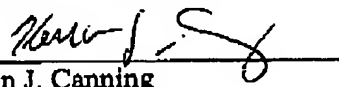
depend on claim 1. Claims 15-17 depend on claim 10. Claim 30 depends on claim 27. Thus, neither Farrell nor Binnig nor Yang alone or combined detract from the patentability of claims 5-7, 15-17 and 30. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the Examiner's rejection of claims 1-30 under 35 U.S.C. § 103(a).

III. Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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